

REMARKS

The Examiner's careful review and examination of the subject application are noted and appreciated. Applicants' representative respectfully thanks Examiner for the telephone interview of May 16, 2006.

The present invention relates to A hydrogen storage alloy comprising a first phase comprising 10 to 40 atomic percent titanium, 27 to 80 atomic percent vanadium, 10 to 60 atomic percent chromium and greater than 0 to 15 atomic percent manganese and a secondary phase comprising one or more oxides, nitrides, carbides, oxycarbides, oxynitrides, carbonitrides, or oxycarbonitrides, wherein the one or more oxides, nitrides, carbides, oxycarbides, oxynitrides, carbonitrides, or oxycarbonitrides each include at least one metal selected from magnesium or calcium dispersed throughout said first phase. The hydrogen storage alloy, at temperatures of 40°C or less, reversibly stores at least 1.75 weight percent hydrogen and desorbs at least 60% of the maximum hydrogen storage capacity.

Applicants have carefully reviewed the above-identified Office Action. Applicants contend that, in view of the clarifying remarks set forth herein, all bases of objection and rejection have been overcome. Accordingly, Applicants respectfully request withdrawal of the pending rejections and allowance of the claims submitted.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

For the reasons which follow hereinafter, the rejection of claims 1-7, 9-13, and 15-18 under 35 U.S.C. §103 as being obvious over Okada et al. (U.S. Pat. Pub. No. 2004/0011444) and should be withdrawn.

Okada et al. discloses a method of absorption-desorption of hydrogen storage alloy and hydrogen storage alloy and fuel cell using said method (Title). The hydrogen storage alloys are body centered cubic alloys. The hydrogen storage alloys one or more elements which stabilize the body centered cubic structure. Since oxygen deteriorates the effective absorption amount of hydrogen, the alloy preferably includes as little as possible. To prevent spinodal decomposition, a heat treatment is not applied to the alloy. The alloy may also include rare earth elements which act as an oxygen getter.

In contrast, the presently pending invention claims a hydrogen storage alloy having a first phase and a secondary phase dispersed throughout the first phase. The secondary phase comprises one or more oxides, nitrides, carbides, oxycarbides, oxynitrides, carbonitrides, or oxycarbonitrides, wherein said one or more oxides, nitrides, carbides, oxycarbides, oxynitrides, carbonitrides, or oxycarbonitrides each include at least one metal selected from misch metal, magnesium, or calcium. The excellent

reversible capacity and desorption rates of the alloys of the present invention are attributed to the secondary phase distributed in the first phase. Okada et al. do not teach a secondary phase as presently claimed. As such, the presently pending invention is readily distinguishable and clearly patentable over the cited reference and the rejection should be withdrawn.

For the reasons which follow hereinafter, the rejection of claims 1-24 under 35 U.S.C. §103 as being unpatentable over Sapru et al. is respectfully traversed and should be withdrawn. Applicants' representative selects option 4 on page 7 of the final rejection.

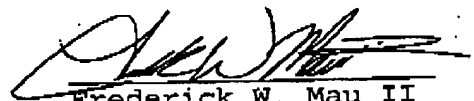
35 U.S.C §103(c) states that "[s]ubject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person" and "... subject matter developed by another person and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person if the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made".

The present invention was made by employees of Texaco Ovonic Hydrogen Systems, LLC and under obligation of assignment to Texaco Ovonic Hydrogen Systems, LLC. Texaco Ovonic Hydrogen Systems, LLC was a 50/50 joint venture between Energy Conversion Devices, Inc. and Chevron Texaco Corporation via a joint research agreement for the development of hydrogen storage and related technologies. At the time the present invention was made, the subject matter of U.S. Pat. No. 6,616,891 was already assigned to Energy Conversion Devices, Inc. As such, U.S. Pat. No. 6,616,891 shall not preclude patentability of the present invention under 35 U.S.C. 103 and therefore Applicants respectfully request that the pending rejection be withdrawn.

Accordingly, Applicant submits that the present amendment places the application in condition for allowance. The Examiner is respectfully requested to pass the application to issuance.

The Examiner is respectfully invited to call the Applicants' representative should it be deemed beneficial to further advance prosecution of the application.

Respectfully submitted,



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